CLAIMS

I CLAIM:

1. A printed circuit board comprising a plate made of an insulating material and having opposite surfaces and having a connection strip portion including a grouping of at least three rows of sets of at least three spaced apart connection locations in each set on at least one of said plate surfaces, the centers of the connection locations in each set being spaced from each other by a predetermined distance, groups of conductive strips on one of said plate surfaces, each conductive strips being aligned with and in electrical conductivity with one of the rows of three spaced apart connection locations each connection location defining an electrical contact point on the strip with all of the conductive strips being electrically isolated from each other, and the sets being aligned in each row end-to-end and each row being offset or staggered from each adjacent row , such that an array of spaces is formed, with each space in an interior row forming a center of a diamond shaped four connection point connector, that has a connection location on a conductive strip at each of its four points or corners, that originates from a different conductive strip.

2. The printed circuit board of claim 1 wherein said electrical contact points comprise a metal foil area on at least one of said surfaces with a hole through it's center that extends through said plate and both of said surfaces such that a wire or lead from an electrical component can pass through said hole from the opposite surface of said plate and a soldered connection can be made between said ring and said wire or lead, this technique being commonly referred to as through hole mounting.

3. The printed circuit board of claim 1 wherein said electrical contact points comprise a solid metal foil area on at least one of said surfaces such that a soldered connection can be made between metal foil said area and a wire or lead from an electrical component that is placed on the same surface as said area, this technique being commonly referred to as surface mounting.

4. The printed circuit board of claim 1 wherein some of said electrical contact points comprise a metal foil area on at least one of said surfaces with a hole through it's center that extends through said plate and both of said surfaces such that a wire or lead from an electrical component can pass through said hole from the opposite surface of said plate and a soldered connection can be made between said ring and said wire or lead, this technique being commonly referred to as through hole mounting and some of said electrical contact points comprise a solid metal foil area on at least one of said surfaces such that a soldered connection can be made between metal foil said area and a wire or lead from an electrical component that is placed on the same surface as said area, this technique being commonly referred to as surface mounting such that said circuit board can support both said through hole mounting and said surface mounting of wires or leads from electrical components.

5. The printed circuit board of claim 1 wherein said space is approximately 0.1 inch.

6. The printed circuit board of claim 5 wherein the distance of said offset of adjacent rows is a fractional distance no greater than approximately 0.1 inch.

7. The printed circuit board of claim 5 wherein the distance of said staggering of adjacent rows is a pre-selected distance that is no less than approximately 0.1 inch.

8. The printed circuit board of claim 1 combined with a terminal strip portion in said plate comprising at least one elongate grouping of transversely extending rows of connection locations, with each row containing three to seven connection locations, a conductive strip on one of said plate surfaces being aligned with and in electrical conductivity with each row, each connection location defining an electrical contact point on the conductive strip, with all of the conductive strips being electrically isolated from each other, and the adjacent

connection locations having a predetermined center-to-center spacing between them.

9. The printed circuit board of claim 8 comprising two elongate groupings of transversely extending rows of holes.

10. The printed circuit board of claim 9 wherein the two groupings are spaced apart a distance which will result in an end hole in one row of holes in one grouping of rows of holes having a center-to-center distance of approximately 0.3 inch with the closest end hole in a row of holes in the other grouping of rows of holes.

11. The printed circuit board of claim 8 wherein the center-to-center spacing between adjacent connection locations is approximately 0.1 inch.

12. The printed circuit board of claim 8 wherein the center-to-center spacing between adjacent rows is approximately 0.05 inch.

13. The printed circuit board of claim 1 combined with a distribution strip portion comprising at least one line of spaced apart connection locations on at least one surface of the plate, with adjacent connection locations being separated by a predetermined center-to-center spacing and a conductive strip on said plate surface, being aligned with and in electrical conductivity with one of the rows of spaced apart connection locations.

14. A printed circuit board comprising a plate made of an insulating material and having opposite surfaces and having a connection strip portion including a grouping of at least three rows of sets of at least three spaced apart connection locations in each set on at least one of said plate surfaces, the centers of the connection locations in each set being spaced from each other by a predetermined distance, groups of conductive strips on one of said plate surfaces, each conductive strips being aligned with and in electrical conductivity with one of

the rows of three spaced apart connection locations each connection location defining an electrical contact point on the strip with all of the conductive strips being electrically isolated from each other, and the sets being aligned in each row end-to-end and each row being offset or staggered from each adjacent row , such that an array of spaces is formed, with each space in an interior row forming a center of a diamond shaped four connection point connector, that has a connection location on a conductive strip at each of its four points or corners, that originates from a different conductive strip, a terminal strip portion in said plate comprising at least one elongate grouping of transversely extending rows of connection locations, with each row containing three to seven connection locations, a conductive strip on one of said plate surfaces being aligned with and in electrical conductivity with each row, each connection location defining an electrical contact point on the conductive strip, with all of the conductive strips being electrically isolated from each other, and the adjacent connection locations having a predetermined center-to-center spacing between them and a distribution strip portion comprising at least one line of spaced apart connection locations on at least one surface of the plate, with adjacent connection locations being separated by a predetermined center-to-center spacing and a conductive strip on said plate surface, being aligned with and in electrical conductivity with one of the rows of spaced apart connection locations.

15. The printed circuit board of claim 14 wherein the terminal strip portion comprises two elongate groupings of transversely extending rows of holes.

16. The printed circuit board of claim 15 wherein the two groupings are spaced apart a distance which will result in an end hole in one row of holes in one grouping of rows of holes having a center-to-center distance of approximately 0.3 inch with the closest end hole in a row of holes in the other grouping of rows of holes.

17. The printed circuit board of claim 14 wherein said connection strip portion, said terminal strip portion and said distribution strip portion are all formed in a one piece, integral plate.

18. The printed circuit board of claim 14 wherein said connection strip portion, said terminal strip portion and said distribution strip portion are formed in separate plates and then assembled together to form the printed circuit board.

19. The printed circuit board of claim 14 being sized to fit directly into a commercially available project box.

20. The printed circuit board of claim 1 wherein five rows of sets of connection strips are provided with each row being offset from each adjacent row and the center row being staggered from the two outside rows and a diamond shaped eight connection point connector being formed in the center of the four connection point connector formed by the staggering of every other row such that the eight connection point connector has a connection location on a conductive strip at each of it's eight connection points that originates from a different conductive strip.

21. The printed circuit board of claim 9 wherein each connection strip in the terminal strip portion include said electrical contact points and wherein some of said electrical contact points comprise a metal foil area on at least one of said surfaces with a hole through it's center that extends through said plate and both of said surfaces such that a wire or lead from an electrical component can pass through said hole from the opposite surface of said plate and a soldered connection can be made between said ring and said wire or lead, this technique being commonly referred to as through hole mounting and some of said electrical contact points comprise a solid metal foil area on at least one of said surfaces such that a soldered connection can be made between metal foil said area and a wire or lead from an electrical component that is placed on the same surface as said area, this technique being commonly referred to as surface mounting such

that said circuit board can support both said through hole mounting and said surface mounting of wires or leads from electrical components.

22. The printed circuit board of claim 9 wherein each connection strip in the terminal strip portion is offset or staggered from each adjacent connection strip such that an array of spaces is formed, with each space in an interior row forming a center of a diamond shaped four connection point connector, that has a connection location on a conductive strip at each of its four points or corners, that originates from a different conductive strip.

23. The printed circuit board of claim 14 wherein the connection strip portion comprises five rows of sets of connection strips with each row being offset from each adjacent row and the center row being staggered from the two outside rows and a diamond shaped eight connection point connector being formed in the center of the four connection point connector formed by the staggering of every other row such that the eight connection point connector has a connection location on a conductive strip at each of it's eight connection points that originates from a different conductive strip and the terminal strip portion comprises a plurality of connection strips that are offset or staggered from each adjacent connection strip such that an array of spaces is formed, with each space in an interior row forming a center of a diamond shaped four connection point connector, that has a connection location on a conductive strip at each of its four points or corners, that originates from a different conductive strip.